

PAARAgraphs

Since 1937

Monthly Newsletter for the Palo Alto Amateur Radio Association, Inc.¹



Calendar

August 4, 1995 PAARA Meeting

Menlo Park Recreation Center
700 Alma Street, Menlo Park 7:30-9:30 PM

August 16, 1995 PAARA Board Meeting

Red Cross Bld. 400 Mitchell Ln., Palo Alto, 7:30 P.M.

September 8, 1995 PAARA Meeting

Sept. 20, 1995 PAARA Board Meeting

October 6, 1995 PAARA Meeting

October 14, 1995 PAARA Auction

October 18, 1995 PAARA Board Meeting

October 20, 21, & 23 1995 Pacificon '95

Concord, CA contact-Richard Schulze, AA6DL
(510) 932-6125 (hotline)

November 3, 1995 PAARA Meeting, 7:30

Nov. 15, 1995 PAARA Board Meeting

December 1, 1995 PAARA Meeting, 7:30

December No PAARA Board Meeting

December 6, 1995 PAARA Holiday Banquet

January 5, 1995 PAARA Meeting, 7:30



Program

August 4, 1995

Speaker: ?? Not confirmed at press time.

Check on NET Monday night before meeting.

(See page 6 for PAARA NET)

DX

**IT'S
ALL
YOURS!**



DX is relative, not "a" relative, but related to the closeness and distance of the station with whom you are talking. During the dx doldrums, dx may mean working a station much closer than a station worked during the sunspot peak years.

These summer days the bands are not as alive with foreign dx as they usually are during the winter months. HOWEVER, starting around the first of June, the 20 meter band was superlative with dx activity with all continents coming thru in fine shape. It was easy to work 60 countries in several days. However, today, a month later, very few dx stations were heard and only Tahiti was worked. So the lack of sunspots took over, but it does pay to check every day, maybe the openings will once again appear.

Ron, W6VG

Spread Spectrum for Palo Alto

Metricom--a Los Gatos, California company--has agreed to provide Palo Alto with city-wide wireless service allowing portable and mobile computers and personal digital assistants (PDAs) to access telephone-based e-mail services. The Metricom system uses multiple, low-power radios installed atop utility poles that operate in frequency-hopping spread-spectrum fashion. Metricom operates the service in Cupertino, and plans expansion soon into San Jose and Walnut Creek.

Users pay \$29.95 a month for unlimited usage. (Interesting? Maybe hams will find a way to integrate this new communications technology into their emergency or special-event operations.-AF6S)

Omri Serlin, AA6TA April '95 "EMARC Policy"-ARNR

Miscellaneous Dates

Flea Market at Foothill (6AM - 2PM)

March PAARA
 April The Perham Foundation
 May SCCARA
 June SPECS
 July EMARC
 August 12 SVECS
 September 9 American Red Cross (PA Chapter)

PAARA Palo Alto Amateur Radio Association

meets 1st Friday 7:30 each month, Net 145.230 each Monday
 8:30, contact Jerry Tucker WA6LNV 415-961-3266.

EMARC Electronics Museum Amateur Radio Club

Meets 4th Friday 7:30 each month,
 contact Sheldon Edelman 415-858-2176.

NCDXC Northern California DX Club

Meets 2nd Friday each month, repeater for member info 147.360
 each Thursday 8:00PM, contact John Troster W6ISQ 415-854-3939.

NorCalQRP Northern California QRP Club

Meets 1st Sunday each month, contact Jim Cates 3241 Eastwood Rd.,
 Sacramento, CA 95821.

Perham Foundation, contact Sy Stein WA6ROM 408-734-4453

SPECS Southern Peninsula Emergency Communication System

Meets each Monday 8:00PM on Net 145.27, 224.36, 440.80 Mhz+
 contact Mike Hastings KB6LCJ, 408-243-6745 or 408-249-6909.

Disaster Services, Palo Alto Chapter, American Red Cross

Meets 3rd Wed. each month 7:30PM, HF, packet, BBS, ATV,
 OSCAR Gateway, NASA satellite,
 contact Ruth Claypool 415-688-0423.

VE Exams Ampex Cafeteria, 3rd Saturday each month, 11AM

PAARAgaphs Ad Rates

PAARAgaphs accepts paid advertisements from non-members (short personal ads remain free for members in good standing).

All ad rates listed are per issue only.

1. Not for profit ads by association members for ham-related items and wants. No cost for business card size ads (additional space at \$2.50 per business card size).
2. For Profit organizations and/or individuals: \$5-business card size, \$25-half page, \$50-full page or back cover

These fees may be reduced or waived in exchange for a valuable consideration that is given to the Association or its general membership. Such consideration must be in addition to any existing arrangements with the association.

The PAARAgaphs editors reserve the right to reject any ad deemed to be not in the best interest of the Association. All fees are for "scanner-ready" copy or text-only ads.

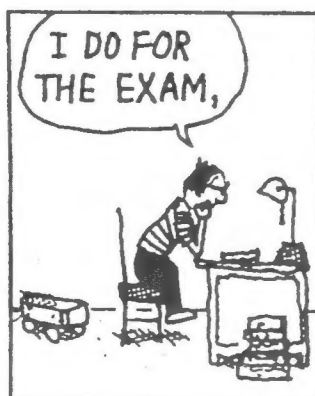
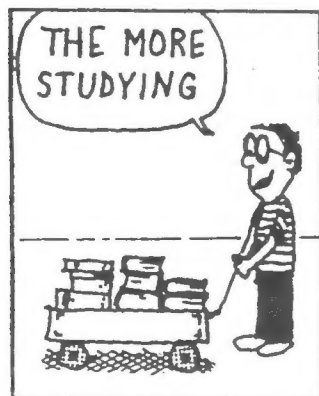


VE TESTS

June was another slim month for applicants, with 17 showing up, and all of them passing one test or another. I was very pleased to see one of our Boy Scouts, **Seth**, on hand to take a test, and hope more of the scouts avail themselves of the VE tests. On hand to administer the tests at the Ampex cafeteria were, **Joe KB6OWG**, **Gordon W6NLG**, **Bob W6YMR**, **Gene KK6LO**, **Dan WB6STW**, **Bill Sooman WB6UVO**, and **Ron W6VG**. Conspicuous by their absence and sorely missed, were **Joan Chopin WA6BXT**, and **Steve Stuntz K6FS**. Tests are given at the Ampex cafeteria every 3rd Saturday of each month. 11 A.M.

May was a very slim month for FCC exams at our volunteer testing at Ampex. But in July we gave 20 applicants a total of 37 tests. The oldest applicant was 81 and the youngest was 9. The youngest, **John Kepple** of Hanford passed his general class written and code. The family of four are all licensed, and the father has the lowest class of the whole family. Guess who got a lot of razzing today? The VE volunteers on hand were **Joe Horne Sr.**, **Gene Irazarry**, **Bill Sooman**, **Dan Curry**, **Ron Panton**, and **Bob Friebertshauser**. **Ron Panton, W6VG**

ELMER



By Rich Regent, K9GDF

Palo Alto Amateur Radio Association, Inc.
PO Box 911
Menlo Park, CA 94026

President.....To Be Filled
 VP.....To Be Filled
 Secretary.....VicBlack, Jr., AB6SO (415) 366-0636
 Treasurer.....Dave Bailey, WS6W (408) 730-5215
 Program Director.....To Be Filled
 Trustee/Property/Badges..Fred Canham, K6YT (415) 948-8238
 ARES Officer.....Lily Anne Hillis, N6PGM (415) 325-5484
 Club Historian.....Steve Stuntz, K6FS (415) 322-4952
 Raffle Chairperson.....Sy Stein, WA6ROM (415) 967-0362

Board of Directors

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 Koert Koelman, KC6WCI (415) 593 5613
 Kit Kohlmoos, W6ISO (415) 366 7813
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 Bill Smith, KE6CHQ (415) 366 9173
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Submit material for PAARAgaphs by the 15th



Here & There

Software Radio

You've heard of a short-wave radio, but have you heard of a software radio? Analog Devices, Inc. of Norwood, MA has just announced availability of their new low-distortion, high-speed AD9042 analog to digital (A/D) converter. The device is designed to operate over the entire 12.5 MHz-wide cellular telephone band. It samples the entire band and then uses software filters to extract the desired frequencies representing 60 user channels. This is a software engineer's idea of how to build a radio on a chip. Power consumption is less than 1/2 W with a 5V supply. Right now the AD9042 is available in a ceramic dual-in-line-package (DIP) for under \$200, but by fall will be available in a plastic surface mount package for less than \$50. In a couple of years the chips should be available cheap on the surplus market.

de Vic Black, AB6SO



TREASURER REPORT

Dave Bailey, WS6W

Revenues	MAR 95	APR 95	MAY 95	JUN 95	TOTAL 1995
Dues	126	354	38	12	618
Flea Market	1702	0	0	0	1802
AMPEX Auction	0	0	0	0	0
Total	1828	354	38	12	2420

Expenditures	MAR 95	APR 95	MAY 95	JUN 95	TOTAL 1995
Stamps/Envelopes	0	0	0	64	96
DMV	0	0	0	0	43
State of CA	5	0	0	0	5
City of Menlo Park	0	0	0	0	150
Speaker's Dinner	0	12	13	0	35
Flea Market	789.22	379.47	0	0	1168.69
AMPEX Auction	0	0	0	0	0
Meeting Refresh	16.01	13.79	0	0	44.59
PAARAgaphs	207.53	179.78	0	16.99	404.30
Picnic	0	0	0	160.37	160.37
Misc.	35	0	19.97	0	105.03
Total	1052.76	585.04	32.97	241.36	2211.98

Checking \$ 5,197.26
Savings \$ 17,417.59

FREE EMERGENCY ACCESS CODES

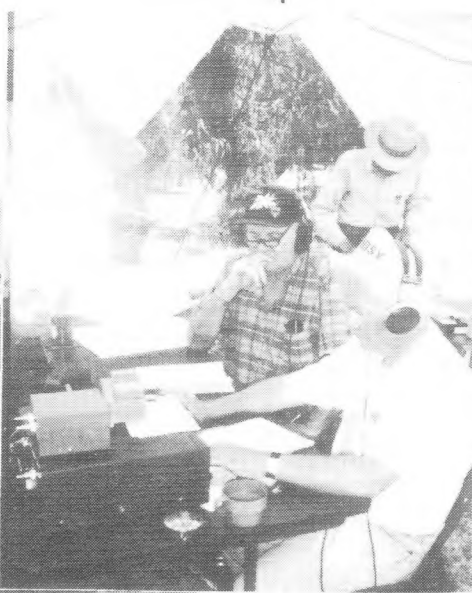
Access to emergency agencies via your 2-meter radio is available free on 145.230 repeater (-600 KHz offset, 100 Hz PL). To receive the emergency numbers which cover Fire, Police, AAA, Allstate Road Service, Sheriff, plus security services at many colleges in the Bay Area from Berkeley and San Francisco on the North to San Jose on the South, send a self-addressed-stamped-envelope (SASE) along with a copy of your ham license to:
 523 Repeater, P.O. Box 391288, Mt. View, CA 94039-391288

Allow about two weeks for delivery. If the instructions that come with the access codes do not seem to work for you, feel free to call W6APZ at 415-494-0128. He will talk you through the process using one of the three non-emergency test numbers.

de Rich, W6APZ

Field Days

Year	Phone	CW	QSOscore	Class
1989	1245	610	4930	3A
1990	1275	580	4870	3A
1991	989	530	4098	3A
1992	1147	628	4806	3A
1993	956	677	4620	2A
1994	1283	198	3358	2A
1995	862	682	4452	2A



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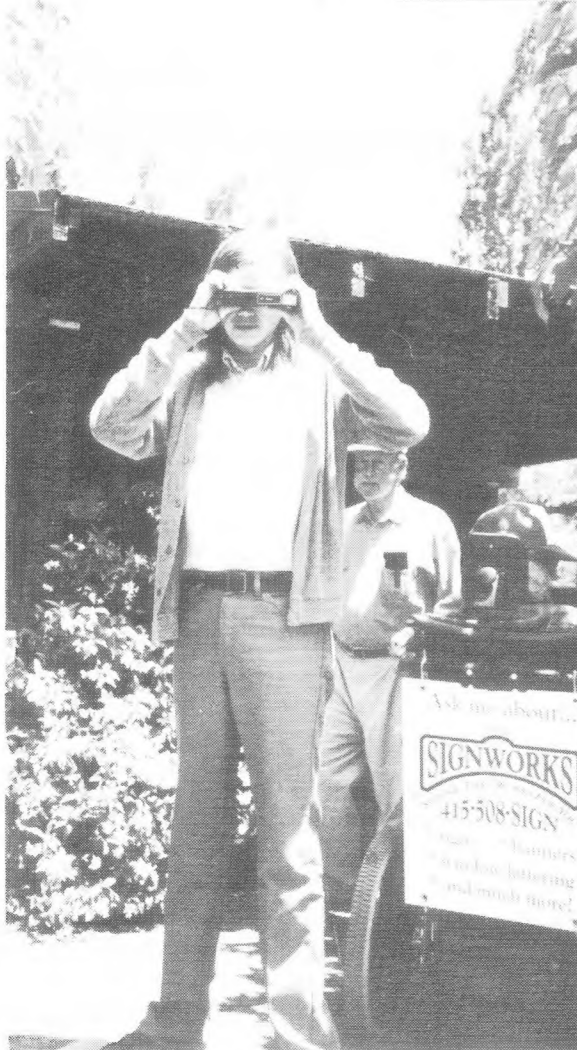


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NEWS RELEASE

(Sent to the press 6/21/95, by Koert, KC6WCI)

On Saturday, June 25 at noon, amateur radio communities all over the United States will again start their 24-hour Field Day contest, organized by the American Radio Relay League (ARRL).

Amateur radio clubs and individual radio operators (also called ham radio operators) will set up transmission stations away from the regular power grid. Usually they will operate from mountain tops, near the water and in other areas with an unrestricted view so that they can get maximum signal out. They will get their power from generators, solar cells, batteries and even hand cranked power.

Most clubs operate stations on the short-wave band in either Morse code (CW) or voice (phone). Many also operate satellite stations which relay the signal to the many amateur radio satellites which circle the earth. Others operate on packet radio, a digital wireless radio mode which works much like a modem in a computer. Just about any leading edge communication method is used and often has been invented by the amateur radio community. The Boy Scouts, who working on their radio merit badges, will operate the Novice Stations this year.

While Field Day is a contest and a social event for amateur radio operators all over the country, there is a serious purpose. It prepares radio operators to serve the community in case of emergencies, away from their regular locations and homes and without the benefit of standard line electricity.

There are several amateur radio emergency service groups in all counties of the US. They assist local authorities in providing communications during major emergencies (e.g., tornadoes, Oklahoma bombing, etc.) when local authority communication circuits usually get overloaded. They also keep in practice through providing radio communication during local events, such as parades, bicycle races, etc.

If you are interested in learning more about Field Day, drop by at the Palo Alto Amateur Radio Association (PAARA) Field Day site. It is located at the Palo Alto Boat Works in Palo Alto. Take the University Exit from the Bayshore Freeway, head East until Bay Road. Turn right on Bay Road until

you pass the bird sanctuary and reach the Palo Alto Boat Works.

If you like to learn more about amateur radio in general and what it takes to get your license, come to one of PAARA's regular meetings on the first Friday of each month (July is second Friday) at the Menlo Park Recreation Center at 7:30 p.m. Guests are always welcome and PAARA members will be glad to show you the right path or will refer you to other radio clubs if these are more convenient.

Ham radio has come a long way since Marconi. This is a fascinating hobby for just about anyone. Give it a try, you will enjoy it. For further information call PAARA at 415-593-5613 (evenings) or 510-271-7587 (day).

Koert Koelman (KC6WCI) Acting President of PAARA

NOTE TO THE PRESS: If you would like to visit the site, let me know and I will line up some knowledgeable people for you to interview. There is also plenty of opportunity to take some interesting pictures.



Here & There

PAARA PICNIC

Once again it was such a pleasure to see such a great turnout for the annual picnic at our QTH, and that everyone seems to enjoy themselves so much. Very much appreciated was the help we received from **Koert & Francesca Koelman, Wally & Joan Porter, Gerry Tucker, Les Zwiebel, and Mike Gavin.** We had a great surprise a few days ago when **Koert & Francesca** appeared at our door with the lovely gift from PAARA. A lot of love and thought went into choosing the beautiful "Gardens of the World" book for us. We truly appreciate it. Thanks very much.

Helga & Ron Panton

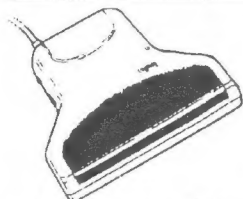
1 PAARA-Palo Alto Amateur Radio Association-P.O. Box 911, Menlo Park, California 94026-0911

Club meetings are on the first Friday of each month, 7:30pm at the Menlo Park Recreation Center, 700 Alma Street, Menlo Park, CA. Radio NET every Monday evening, at 8:30pm, on the 145.230-600 repeater Mhz, PL tone off. Membership in PAARA is \$6.00 per calendar year which includes a subscription to PAARAgaphs. Make payment to the Palo Alto Amateur Radio Association.

Permission is hereby granted to reprint from this publication with appropriate source credit.

BROW MOUNTED BINOCULAR MAGNIFIER

Wear this handy magnifier with its velcro clasp. One size fits all so it's always comfortable. Magnifier assembly tilts up out of the way when not needed. Fixed lens gives 1.8X magnification for most close-up activity. For a closer look a second binocular lens tilts down from inside visor. For turbo peep mode, swivel the loupe in front of the right eye. Combinations are 1.8X, 2.3X, 3.7X and 4.8X. (MP242) **\$23.95 each**



HAND-HELD SCANNER

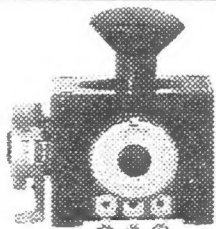
New units with PC-compatible "Interpreter" OCR software with imaging capability, 100-400 DPI resolution, LED and audible scanning speed indicators. 8-bit I/O card included. Requires Windows. (SC04-1) **\$59.95 each**

3300µF 16V RADIAL CAPACITOR
1.375"L x 0.625"D. (95P012)

50 for \$19.95

JOYSTICKS

Two 150K pots.
(93P005)
\$3.95 each



TOROID CORE ASSORTMENT

WOW! May contain tape wound, powdered metal, ferrite material cores, different sizes. (92N016) **20 for \$4.95**

40-CHANNEL CB TRANSCEIVER MODULE

These are new units with book and schematics. They have been tested to be fully functional. The microphones are missing. All the controls and channel readout were in the mike. Build a remote base or use for parts. (95A001) **\$10.00 each**

H-P MICROWAVE DIODES

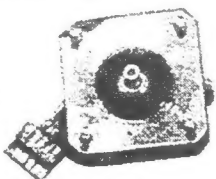
QSCH-1682, set of 3 matched.

(92S074) **\$5.00**

5082-2351, matched pair. (92S076) **\$3.79**

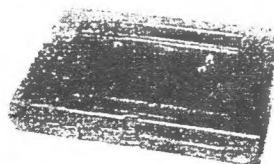
STEPPER MOTOR

12V, 1A, 0.9°/step. 1-5/8" square x 3/4" deep. 3/16" x 1/2" shaft. Made by Japan Servo. (95M006) **\$4.95 each**



ANTISTATIC CARRYING CASE

Lined top and bottom with antistat foam. Measures 13" x 10" x 2" OD, with locking tabs and snap for ground wire. Good for storing and carrying all kinds of valuable goodies. (95Z007) **\$4.95 each**



NAVEL LINT EXTRACTOR

Tapered round brush with soft bristles. Work surface about 1" long, overall length about 4". Also good for combing cookie crumbs from facial fur, cleaning keyboards, dashboards and small surfboards. Get into tight places in delicate electronic equipment without damaging it. Keep several handy. Get a couple for the missus. Great gag gift. (95Z006) **2 for 99¢**



6 METER FSK BOARD

Crystal controlled on 50.675 receive frequency. Super het with 10.7MHz IF. Three ICs and one transistor. Not a kit! New, with schematics and spec sheet for major components. (92A067) **\$9.95 each**



HARD DRIVES (Recycled)

Quantum Q540 - 36 Meg MFM 5 1/4" full-height. (94C025) **\$29.95 each**

Seagate ST4053 - 44 Meg MFM 5 1/4" full-height. (94C026) **\$39.95 each**

Seagate ST-225 - 20MB MFM 5 1/4" half height. (94C033) **\$19.95 each**

ALLEGRO

STEPPER MOTOR DRIVER IC

UCN5804. Single-step, two-phase and half-step modes. 1.25A rating. New. (93I002) **\$4.50 each**

• Packaged with 5V stepper motor (92M010) and schematics. (93I003) **\$9.95 each**



MULTI-VOLTAGE POWER BRICK

+5V DC @ 500mA, +12V or -12V DC @ 415mA. (95E023) **\$9.95 each**

STANDOFF ASSORTMENT

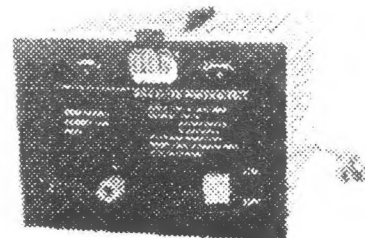
Popular sizes and styles used in electronics. (92J007) **100 for \$4.95**

USED TUBES - \$1.00 EACH

Your choice. Pulls, tested good.

3CU3	6SN7	12BE6
4BZ6	8AW8	35A5
6AX5	12AT7	35W4
	12AX4	

Prices good until July 31, 1995

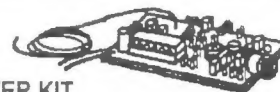


13.8 VDC BENCH POWER SUPPLY

MG Electronics PS-32. Input voltage: 105-125 VAC 60 Hz. Output voltage: 13.8 VDC. Output current: 30 Amps continuous 32 Amps surge. Output ripple: 100 mV RMS. (95E019) **Brand New! \$170.00**

VOX SWITCH FM TRANSMITTER KIT

Sound-activated circuit with FM transmitter. Sensitive electret mike picks up audio which is amplified and used to modulate FM RF transmitter. Circuit requires the ability to tweak RF circuits by stretching/compressing coils. Operates on 6VDC. 4-cell "AA" battery holder supplied. 2.5" x 1.5" x 0.625". Sold for educational purposes only. (Kit 28) **\$12.95 each**



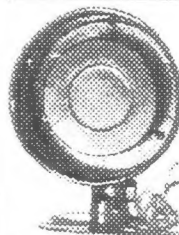
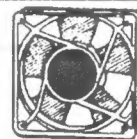
SIZE "D" NICAD BATTERIES

Strapped in pairs with welded contacts. May be separated with care. (94E009) **\$4.95 pair**



24 VDC FAN

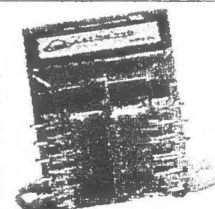
3-9/16" sq. by 1" thick. (95F004) **\$7.95 each**



LOUD SIREN
12V DC, 120 dB.
(95U001)
\$9.95 each

MINI ISOLATION TRANSFORMER

Use for control circuits and other small-load equipment drawing 25 Watts or less. Step 240V down to 120V or 120V up to 240V, or use for 120V to 120V or 240V to 240V isolation. Split primary and secondary for versatility. 2" x 2.25" x 2.375". Wt. 1.5 lb. (95N004) **\$4.95 each**



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